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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,617	07/27/2006	Reinhard Leigraf	VOI0368.US	9960

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EXAMINER

TRAN, BINH X

ART UNIT	PAPER NUMBER
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1792

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12/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,617	Applicant(s) LEIGRAF ET AL.	
	Examiner Binh X. Tran	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-51 is/are pending in the application.
- 4a) Of the above claim(s) 39-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-38 is/are rejected.
- 7) ☒ Claim(s) 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I (claims 26-38) in the reply filed on 8-26-2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 39-51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8-26-2009.

Claim Objections

3. Claim 38 is objected to because they include reference characters (L) which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 27, 31, 32, 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, it is unclear from the claim whether "the step of coating the paper web" is referred to the previous coating step in claim 26 or referred to the new additional step.

Claim 31 depends on claim 26. In claim 26, applicants already recites the step of "drying the paper web" in line 7. In claim 31 applicants recites again recites "the step of drying the paper web". It is unclear from the claim whether the step of drying (in claim 26 and 31) refer to the same step or not. If the same drying step is used, then claim 31 fails to further limit the subject matter of previous claim. If these drying steps are different, the examiner suggests applicants to use the label "first" or "second" for each step drying step in order to avoid any confusion.

In claim 32 "prior to a coating step" is indefinite because it is unclear from the claim whether "a coating step" in claim 32 is refer to the same "coating step" in claim 26 or not.

Claim 36 indirectly depends on claim 26. In claim 26, applicants already recites the step of "drying the paper web" in line 7. In claim 36 applicants recites again recites "the step of drying the paper web". It is unclear from the claim whether the step of drying (in claim 26 and 31) refer to the same step or not. If the same drying step is used, then claim 36 fails to further limit the subject matter of previous claim. If these

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drying steps are different, the examiner suggests applicants to use the label "first" or "second" for each step drying step in order to avoid any confusion.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 26-29, 31-34, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhonen (WO 02/103109 A1) in view of Bobsein et al. (US 2003/0178165 A1).

Respect to claim 26, Korhonen discloses a method for the production of a wood-free coating, matt or semi-matt paper web (W), comprising the steps of:

precalendering the paper web using at least one apparatus (500 and/or 800) for precalendering (abstract, Fig 4, page 23 lines 1-10);

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coating at least one side of the paper web (W) by using at least one apparatus (200, or 600) for applying one of a liquid or pasty application medium (abstract, Page 12 lines 11-39);

drying the paper web using at least one apparatus (400 or 710) for drying the paper web thereby create a wood-free coating with a roughness level between 2.2-3.4 μm (PPS) (See pages 4 lines 5-15; page 18 line 18-31; page 22 lines 16-28, Fig 6, pages 23 lines 13-30).

Korhonen fails to disclose the gloss value in the range from 3-35% TAPPI 75 °. Bobsein discloses to measure the sheet gloss using TAPPI 75 ° (paragraph 0054). Bobsein further discloses to control the sheet gloss value of around 30% including 30.74% or 31.72% or 29.34 %, etc (See Table 3, Table 4, and Table 7). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Korhonen in view of Bobsein by perform routine experiment to obtain optimal gloss value because it has been held that determination of workable ranges in not considered inventive.

Respect to claim 27, Korhonen discloses the step of coating the paper web (W) on the first side by way of an other apparatus for applying one of a liquid pasty application medium prior to the precalendering (500 or 800) (See Fig 1, page 16 lines 25 to page 17 line 12, page 22 lines 6-15). Respect to claim 28, Korhonen discloses the coating apparatus s one of a film coating device and a curtain coating device (page 12 lines 10-16, pages 22 lines 7-15)

Respect to claim 29, Korhonen discloses the coating step is carried out on both side of the paper web prior to said precalendering (500 or 800), said at least one apparatus for applying one of liquid (include water) and pasty application medium being a film coating device (Fig 1, page 16 line lines 25 to page 17 line 12, page 22 lines 6-15).

Respect to claim 31, Korhonen discloses the step of drying the paper web (400, 700, 710) (See Abstract). Respect to claims 32 and 37, Korhonen discloses the step of conveying the paper web through at least one film press (300) prior to a coating step (600) (abstract) or prior to said precalendering step (abstract).

Respect to claim 33, Korhonen disclose the apparatus for precalendering is a soft calendar with at least one nip (pages 13 lines 22-25, col. 14 lines 4-10, page 20 lines 15-20); a shoe calendar with at least one nip and a smoothing unit (pages 20 lines 15-20, page 21 lines 1-22, fig 4). Respect to claim 34, Korhonen discloses the coating apparatus includes a first apparatus that coats a first side of the paper web, the apparatus is curtain coating device (page 12 lines 10-16, pages 22 lines 7-15).

9. Claims 30, 35, 36, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhonen and Bobsein as applied to claims 26-29, 31-34, 37 above, and further in view of Johnson et al. (US 2002/0117277 A1).

Respect to claims 30 and 35, Korhonen and Bobsein fail to disclose the apparatus for applying one of liquid and pasty application medium includes a first apparatus and a second apparatus being a curtain coating device (claim 30); or include a second apparatus that coats a second side of the paper web, the second apparatus

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being a curtain coating device (claim 35). However, Korhonen clearly discloses to use plurality of coating device on both side of the web (Figure 4, page 22 lines 6-15).

Korhonen further disclose it is possible to use curtain coating process (page 12 lines 10-15). Johnson teaches to use plurality of curtain coaters to coat both side of the web (paragraph 0026). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify because equivalent and substitution of one for the other would produce an expected result. Further, Johnson's process would improve wear resistant of the paper (paragraph 0007).

Respect to claim 36, Korhonen discloses the step of drying the paper web (abstract).

Respect to claim 38, Johnson disclose that the paper web is not conveyed through any smoothing apparatus nor the paper is conveyed through any calendering apparatus after the paper web has been coated by at least one apparatus for applying one of liquid and pasty application medium (paper slurry) (See Fig 1, Fig 3). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Korhonen and Bobsein in view of Johnson because it will improve wear resistant of the paper.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571)272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Binh X Tran
Primary Examiner
Art Unit 1792

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